Subject: Computers   Topic: Stacks and Queues
Class: 12

1. Write a program to accept and store: employee number, employee name , in a list. Perform following operations by implementing a **stack**. Each inner list is a node.

   1. Insert an element
   2. Delete an element
   3. Display all elements, indicating top
   4. Exit
   Sample list: [[1,"Josh"],[2,"Rohan"]]

2. Write a program to accept and store: language name and region name in a list. Perform following operations by implementing a **queue**. Each inner list is a node.

   1. Insert an element
   2. Delete an element
   3. Display all elements indicating front and rear.
   4. Exit
   Sample list: [["Spanish", "Mexico"],["French", "France"]]

3. Write a program to accept and store: area and pin code in the form of a dictionary. Perform following operations by implementing a **stack**. Each dictionary is a node.

   1. Insert an element
   2. Delete an element
   3. Display all elements, indicating top
   4. Exit
   Sample list: [{' Basavanagudi': 560004},{ 'Konanakunte':560062}]

4. Write a program to accept and store details of a case (handled by civil/criminal courts) : Court complex name, Police station name, FIR and year ,in the form of a tuple. Perform following operations by implementing a **queue**. Each tuple is a node.

   Note: check value of new year entered, with previous(rear element). If new value is less than rear element, display an error message and terminate insert operation, direct the user to main menu.

   a. Insert an element
   b. Delete an element
   c. Display all elements indicating front and rear.
   d. Exit